

## Delta Stewardship Council Workshop on Delta Plan March 11, 2011

Panel C: Reduce Risks to People, Property, and State Interests in the Delta

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- 1. Top three strategies for balancing conservation and development of Delta land resources as well as reducing flood risk to people and property.
  - **Promote urban infill** in Sacramento, West Sacramento, Stockton, and other cities. Preclude new urban and suburban development on undeveloped floodplains. Protecting the Delta's natural landscapes while investing in the region's cities will make the Delta a better place to live, work, and play. The DSC should create regulations that internalize the true costs of floodplain development while creating regulatory incentives for infill development.
  - Control risk, not floods. Flood risk is the probability of flooding multiplied by the consequences to lives and property. Levees do not reduce flood risk as stated on page 8-4 of the draft plan. To the contrary, levee improvements that enable new urban development on undeveloped floodplains significantly increase flood risk. Emergency response should be deployed as part of a larger suite of risk management tools including landuse restrictions, building codes, mandatory flood insurance, real-estate disclosure requirements, education, and flood management improvements. Emergency response is important but not sufficient. Readiness is difficult to sustain, and the largest storm events could overwhelm state and local response. Even successful emergency response that saves lives still leaves communities vulnerable to catastrophic property loss and social dislocation.
  - Expand flood bypasses through the Delta to route flood water away from urban areas and into the undeveloped tidal waters of the primary zone. Expand conveyance capacity for the Sacramento and American Rivers by expanding the Yolo bypass and creating a new flood bypass parallel to the Sacramento ship channel to route flood waters from the Pocket area and toward restored marsh at Prospect Island. In the South Delta, substantially expand Paradise Cut to route water away from Lathrop and Stockton and toward the Old River corridor in the primary zone.

## 2. Top three priorities for improving flood protection and protecting public safety both in the Delta and upstream.

- **Protect and restore floodplains:** Floodplain restoration is essential to restoring the Delta ecosystem and protecting public safety. We cannot restore the Delta unless we restore floodplain habitat and we cannot reduce flood risk for Central Valley communities unless we give rivers more room to safely convey flood waters.
- Expand flood conveyance capacity through the urban reaches of both the lower Sacramento and San Joaquin Rivers by expanding the existing bypass system, setting back levees, and restoring floodplain habitat. Expanding floodways near urban areas will lower flood stages and velocities through constrained urbanized reaches, provide recreational opportunities, and restore floodplain habitat critical to the ecology of the Delta.
- Reduce peak flood flows into the Delta through reservoir reoperation and planned, transitory flood storage during infrequent events (> 25-50 year event) in rural flood basins upstream of the Delta. Require compensatory flood attenuation mitigation for all upstream levee improvements that would otherwise increase the peak flood volume conveyed to the Delta.

## 3. Top three priorities for addressing the effects of climate change and sea level rise on highways and other infrastructure that cross the Delta.

- Hope for the best and prepare for the worst. For purposes of transportation and landuse planning and to minimize future flood risks on new developments, assume that many islands in the Central Delta will fail due to sea level rise, seismic activity, and future floods. Consider how these flooded Delta islands will increase wave action and flood risk for existing and proposed infrastructure including new developments along the periphery of the Delta. Continue to invest in the levee subventions program to bolster levees during an interim transition period until we learn more and have adapted infrastructure as necessary.
- **Prioritize protection of Sherman, Jersey, and Brannon Islands.** These islands provide a critical barrier to salinity intrusion and are traversed by critical infrastructure including highway 160, regional power lines, and at least one major gas line. Excavate high ground on Decker and Brannon Islands to provide material to stabilize Sherman Island with cut-off levees. Consider constructing a new set-back levee on the west side of Brannon Island and realigning highway 160 on top of the new levee to create a wider flood corridor, better habitat, and a safer highway.
- Mitigate impacts on Highways 80 and 580. Assume that highways 4 and 12 will fail and shift traffic to highway 80 and 580. Retain transportation expertise to provide recommendations on how to accommodate more traffic, particularly freight traffic, between the inner Bay Area and the Central Valley.